Directive Number and Title:

- (1) DOE Order 452.4, SECURITY AND CONTROL OF NUCLEAR EXPLOSIVES AND NUCLEAR WEAPONS
- (2) DOE Manual 452.4-1, PROTECTION OF USE CONTROL VULNERABILITIES AND DESIGNS'

Originating Office: NA-121.2, NUCLEAR WEAPONS SECURITY AND CONTROL DIVISION

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## Background

DOE Order 452.4 and the contractor requirements document (CRD) were originally published in 1997 and implemented the security and use control components of the Nuclear Explosive and Weapon Surety Program as defined in DOE Order 452.1B, NUCLEAR EXPLOSIVE AND WEAPON SURETY PROGRAM. DOE Manual 452.4-1 establishes a general process and provides direction for controlling access to and dissemination of a special category of sensitive use control information that has been designated as Sigma 14 and Sigma 15 weapon data at the DOE.

The Order has been revised to clarify roles and responsibilities and to update organizational titles and symbols. DOE O 452.4A was published December 17, 2001. DOE M 452.4-1 will also be revised.

## Overview of Requirements

The main purpose of the Order is to prevent deliberate unauthorized use of U.S. nuclear weapons. The Order implements the use control policies of the Department of Energy, the President of the United States, and applicable use control policies of the Department of Defense. The Manual addresses Sigma 14 and Sigma 15 and presents DOE directions for procedures to control access to information or material that would significantly enhance an adversary's ability to accomplish deliberate unauthorized use of a nuclear weapon or explosive. The Manual clarifies specific requirements, as coordinated with those who maintain this information.

The CRDs task the laboratories and contractors to support the Nuclear Explosive and Weapon Surety (NEWS) Program. The Order CRD specifies top-level requirements that support the NEWS program. The Manual CRD provides consistent requirements for the maintenance of this very sensitive information.

<sup>\*</sup> The review teams for the Order and the companion Manual worked as a single team.

# **Analysis**

The directives only apply to DOE and contractor personnel who perform nuclear explosive operations and those with access to Sigma 14 or Sigma 15 information. Consequently, the Order is very narrow in scope. It is essential to ensure that contractors design, test, develop, refurbish, and maintain nuclear explosives and nuclear weapons in accordance with Departmental and national use control policies. The Order's top-level requirements give the contractor the flexibility to develop procedures that meet use control policy goals without causing a bureaucratic quagmire. The Manual provides details necessary for consistency, as agreed by existing Use Control Facility Coordinators. No comments were submitted by contractors or others in response to this review.

#### Summary Recommendation

DOE O 452.4 and DOE M 452-.4-1 need to be maintained and kept updated in order to protect public health and safety.

# Minority Views

None.

# Originating Office Comments

NA-121.2 agrees with the above and welcomes all ideas for improvement of nuclear explosive and weapons security and control.